WHAT I CLAIM IS:

1. A web structure, comprising:

   a) a generally hexahedron-shaped frame;

   b) said frame comprising a plurality of points oriented in a manner that no more than three points lie in a common plane;

   c) each pair of the points being connected by a frame segment;

   d) a plane comprising three of said points;

   e) one frame segment passing through said plane and including first and second ends; and

   f) said first and second ends of said one frame segment being generally equidistant from said plane.

2. The web structure of Claim 1, wherein:

   a) said one frame segment is generally perpendicular or skewed to said plane; and

   b) said one frame segment passes through the geometric center of said plane.

3. The web structure of Claim 1, wherein:

a) the three points in said plane form a triangle.

4. The web structure of Claim 1, wherein:

a) said frame comprises five points and ten triangles.

5. The web structure of Claim 1, wherein:

a) said first and second ends of said one frame segment are generally coincident with two of the five points.

6. The web structure of Claim 5, wherein:

a) said one frame segment comprises a generally straight frame segment.

7. The web structure of Claim 6, wherein:

a) said one frame segment forms a triangle with each of the three points in said plane.

8. The web structure of Claim 7, wherein:

a) two of the three points in said plane form two triangles with the remaining two points at said first and second ends of said one frame segment.

9. The web structure of Claim 1, wherein:

a) the frame segment connecting each pair of the points comprises a generally straight frame segment.

10. A web structure, comprising a plurality of frames of Claim 1.

11. The web structure of Claim 10, wherein:

a) said frames are disposed in a side-by-side relationship.

12. The web structure of Claim 10, wherein:

a) said frames are disposed in a plurality of layers.

13. The web structure of Claim 10, wherein:

a) said frames comprise first and second groups;

b) one of said first and second groups is disposed in a side-by-side manner; and

c) the other of said first and second groups is disposed in a plurality of layers.

14. The web structure of Claim 13, wherein:

a) the layers comprise first, second, and third successive layers; and

b) one of said frames in said first layer contacts a frame in each of said second and third layers.

15. A structural element, comprising a plurality of web structures of Claim 1.

16. The structural element of Claim 15, wherein:

a) the structural element is selected from the group consisting of a panel, a beam, a truss, a pillar, and a lattice.

17. A web structure, comprising:

a) a generally hexahedron-shaped outer member comprising first, second, third, fourth, and fifth vertices;

b) a plane comprising said third, fourth, and fifth vertices;

c) said first and second vertices being spaced away from said plane;

d) a plurality of generally hexahedron-shaped inner members disposed in said outer member; and

e) said inner members comprising the same general configuration as said outer member.

18. The web structure of Claim 17, wherein:

a) a first and a second of said inner members are disposed in said outer member in a manner that the second vertex of said first inner member contacts the first vertex of said second inner member.

19. The web structure of Claim 18, wherein:

a) a third of said inner members is disposed in said outer member generally between said first and second inner members; and

b) first and second vertices of said third inner member contact one of the third, fourth and fifth vertices of respective first and second inner members.

20. The web structure of Claim 17, wherein:

a) three of said inner members are disposed in said outer member about said plane; and

c) one of said inner members is disposed on each side of said plane.

21. The web structure of Claim 20, wherein:

a) said outer member comprises a zero level;

b) said inner members comprise a first level;

c) a third level disposed in said first level; and

d) said third level comprises hexahedron-shaped members comprising the same general configuration as said outer member.

22. The web structure of Claim 21, further comprising:

a) an infinite number of levels 'n', wherein 'n' comprises a nonnegative integer; and

b) a higher number level is disposed in a preceding lower number level.

23. A structural element, comprising the web structure of Claim 17.

24. The structural element of Claim 23, wherein:

a) the structural element is selected from the group consisting of a panel, a beam, a truss, a pillar, and a lattice.

25. A web structure, comprising:

a) a generally hexahedron-shaped frame;

b) said frame comprising first and second generally trihedron-shaped portions joined at the bases thereof;

c) said first and second portions comprising first and second vertices, respectively;

d) said frame comprising a plane;

e) a frame segment joining said first and second vertices; and

f) said frame segment passing through said plane.

26. A crystalline web structure, comprising;

a) a generally hexahedron-shaped electrostatic frame;

b) said frame comprising a plurality of points oriented in a manner that no more than three points lie in a common plane;

c) each pair of the points being connected by a line of an electrostatic force;

d) a plane comprising three of said points;

e) one line of electrostatic force passing through said plane and including first and second ends; and

f) said first and second ends of said one line of electrostatic force being generally equidistant from said plane.

27. A web structure, comprising:

a) a plurality of generally trihedron-shaped frames;

b) each of said frames including a vertex;

d) the vertices of four of said frames being disposed in a generally common plane.

28. The web structure of Claim 27, wherein;

a) each of said frames includes a base; and

b) the base of one of said four frames is generally opposite to the base of one of the remaining three frames.

29. A method of forming a web structure, comprising the steps of:

a) providing a plurality of generally hexahedron-shaped frames;

b) each of the frames, comprising:

i) a plurality of points oriented in a manner that no more than three points lie in a common plane;

ii) each pair of the points being connected by a frame

segment;

iii) a plane comprising three of the points;

iv) one frame segment passing through the plane and including first and second ends; and

v) the first and second ends of the one frame segment being generally equidistant from the plane;

c) arranging a plurality of the frames in a side-by-side manner that one of the three points in the plane of a frame contacts one of the three points in the plane of an adjacent frame; and

d) arranging a plurality of the frames in a manner that one of the first and second ends of the one frame segment of a frame contacts the other of the first and second ends of the one frame segment of an adjacent frame.

30. A method of forming a web structure, comprising the steps of :

a) providing a plurality of generally hexahedron-shaped members;

b) each of the members, comprising:

i) first, second, third, fourth, and fifth vertices;

ii) a plane comprising the third, fourth, and fifth vertices;

and

iii) the first and second vertices being spaced away from

the plane;

c) arranging a plurality of the members in a side-by-side manner that one of the third, fourth, and fifth vertices of a member contacts one of the third, fourth, and fifth vertices of an adjacent member;

d) arranging a plurality of the members in a manner that one of the first and second vertices of a member contacts the other of the first and second vertices of an adjacent member.

31. A method of forming a preselected level of a 4-web structure in a three-dimensional space, comprising the steps of:

a) selecting a level '*n*' represented by a non-negative integer *n*,

b) selecting a user supplied 3 × 3 nonsingular matrix *M* of real entries,

c) selecting a user supplied 3×1 matrix C of real entries,

d) selecting the 3×4 matrix 'H' given by

$$H = \begin{bmatrix} 1 & 0 & 0 & 2/3 \\ 0 & 1 & 0 & 2/3 \\ 0 & 0 & 1 & 2/3 \end{bmatrix}$$

e) selecting (if $n > 0$) the set B of all Boolean matrices (matrices that contain only zeros '0' or ones '1' as their entries) such that each column contains at most one '1' (otherwise) the set B which contains the 4×1 Boolean matrix each of whose entries equals zero '0',

f) selecting an empty set {} W, which, after the computations are complete will contain the nth approximation to the 4-web,

g) selecting a matrix

$$\mathbf{B} = \begin{bmatrix} b_{(1,1)} & b_{(1,2)} & b_{(1,3)} & \dots & b_{(1,n)} \\ b_{(2,1)} & b_{(2,2)} & b_{(2,3)} & \dots & b_{(2,n)} \\ b_{(3,1)} & b_{(3,2)} & b_{(3,3)} & \dots & b_{(3,n)} \\ b_{(4,1)} & b_{(4,2)} & b_{(4,3)} & \dots & b_{(4,n)} \end{bmatrix}$$

from the collection B and removing **B** from B by the formula $B = B - \{\mathbf{B}\}$.

h) computing four coordinates $x(1)$, $x(2)$, $x(3)$, and $x(4)$ by the formula

$$x(1) = b(1,1)/2 + b(1,2)/4 + b(1,3)/8 + \ldots + b(1,n)/2^n$$

$$x(2) = b(2,1)/2 + b(2,2)/4 + b(2,3)/8 + \ldots + b(2,n)/2^n$$

$$x(3) = b(3,1)/2 + b(3,2)/4 + b(3,3)/8 + \ldots + b(3,n)/2^n$$

$$x(4) = b(4,1)/2 + b(4,2)/4 + b(4,3)/8 + \ldots + b(4,n)/2^n$$

i) computing five points $P(1)$, $P(2)$, $P(3)$, $P(4)$, and $P(5)$ (each a 4×1 matrix) in four-dimensional space by the formula

$$P(1) = [x(1), x(2), x(3), x(4)]^T$$

$$P(2) = [x(1) + (1/2)^n, x(2), x(3), x(4)]^T$$

$$P(3) = [x(1), x(2) + 1/2^n, x(3), x(4)]^T$$

$$P(4) = [x(1), x(2), x(3) + 1/2^n, x(4)]^T$$

$$P(5) = [x(1), x(2), x(3), x(4) + (1/2)^n]^T$$

Where 'T' denotes the transpose matrix operation,

j) moving the points $P(1)$, $P(2)$, $P(3)$, $P(4)$, and $P(5)$ into three-dimensional space as points $Q(1)$, $Q(2)$, $Q(3)$, $Q(4)$, and $Q(5)$ by the (matrix multiplication and matrix addition) formula

$$Q(1) = MHP(1) + C$$

$$Q(2) = MHP(2) + C$$

$$Q(3) = MHP(3) + C$$

$Q(4) = MHP(4) + C$

$Q(5) = MHP(5) + C$

k) adding ten line segments '[Q(i)Q(j)]' connecting 'Q(i)' to 'Q(j)' to 'W' by the formula

$$W = W \cup \{ [Q(1)Q(2)], [Q(1)Q(3)], [Q(1)Q(4)], [Q(1)Q(5)], [Q(2)Q(3)], [Q(2)Q(4)], [Q(2)Q(5)], [Q(3)Q(4)], [Q(3)Q(5)], [Q(4)Q(5)] \}$$

l) testing to see if 'B' is non-empty, and otherwise outputting 'W', which is the nth approximation of the 4-web.